IN THE CLAIMS:

Please amend the claims to read as follows. The following is a complete listing of all claims and replaces any prior listing in this application.

1. (currently amended) A system for calculating the relative importance of one or more individual input variables to an overall insurance policy profitability score, comprising:

a database for storing values ~~associated with a set of~~ **for various** input variables;

a display; and

at least one data processor **configured** ~~arranged~~ to:

~~generate a multivariate statistical model from the values in the database and~~ **receive** an insurance policy profitability scoring formula, ~~based thereon,~~ said insurance policy profitability scoring formula comprising a sum of a plurality of predictive input variables each having a weighting co-efficient, **values for some or all said variables being stored in the database**;

calculate a score using said scoring formula and a set of input variable values;

calculate a partial derivative of the scoring formula with respect to ~~one or more~~ **each** of the plurality of predictive input variables;

calculate a deviance value for any of the plurality of predictive input variables;

calculate the relative importance of ~~said one or more of~~ **each of said** predictive input variables to a score calculated using the scoring formula **by multiplying the partial derivative and deviance values for that variable;** ~~based on the calculated partial derivative and deviance values;~~

create a rank for each of said input variables based on its relative importance to the score; and

display a **the** score, **each input variable, its value and its rank** ~~and the results of said~~ ~~calculations and a listing of the~~ to a user.

2. (previously presented) The system of claim 1 wherein the data processor comprises a software module that takes the first derivative of the scoring formula with respect to each ~~a~~ selected predictive input variable.

3. (previously presented) The system of claim 1 wherein the plurality of predictive input variables describe characteristics of at least one of an existing policyholder and potential policyholder and the scoring formula is used to generate a score reflective of the expected loss/premium ratio for an insurance policy.

4. (original) The system of claim 3 wherein the premium for the insurance policy is based on the score.

5. canceled

6. (previously presented) The system of claim 1 wherein the data processor includes a software module that receives inputs for a mean value and a standard deviation value and the deviance value is calculated using the formula:

$$\text{Deviance of } x_i = (x_i - \mu_i)/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive input variable x_i.

7. canceled.

8. (currently amended) A computerized method of evaluating the relative individual contribution of one or more predictive input variables to an insurance policy profitability score, comprising:

~~generating a multivariate statistical model to predict insurance policy profitability from a set of input variables and their values;~~

receiving ~~generating~~ a scoring formula based on **a multivariate statistical model to predict insurance policy profitability** ~~said model~~, said scoring formula comprising a sum of ~~a plurality of~~ predictive input variables each having a weighting co-efficient;

receiving values for a set comprising a plurality of said predictive input variables;

calculating a score using the scoring formula and the received values;

calculating a partial derivative of the scoring formula with respect to ~~one or more~~ **each** of the plurality of predictive input variables;

populating a database ~~associated with the system~~ with a mean value and standard deviation value for each of the plurality of predictive input variables;

calculating a deviance value based on the mean value and the standard deviation value for each of the plurality of predictive input variables, wherein said calculation is performed by one of a data processor and a digital computer;

multiplying the deviance value and partial derivative value for each of the plurality of predictive **input** variables to determine the contribution of each of the plurality of predictive **input** variables to a given score;

creating a rank for each of the plurality of input variables based on its relative importance to the score;

and

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displaying said score, **each of the plurality of input variables, its received value and its rank** ~~and said contribution of each of said predictive variables to said score~~ to a user.

9. (previously presented) The method of claim 8, further comprising defining at least one assumption for the mean value associated with at least one of the plurality of predictive input variables.

10. (currently amended) The method of claim 8 wherein said calculating the slope further comprises calculating the first derivative of the scoring formula with respect to the predictive variable of the plurality of predictive variables that is being analyzed.

11. (original) The method of claim 8 wherein the deviance value is calculated as follows:

$$\text{Deviance of } x_i = (\ x_i - \mu_i \ )/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive variable x_i.

12. canceled.

13. (currently amended) A computerized method of evaluating the relative contribution of each of a plurality of predictive input variables to an insurance policy profitability scoring formula, said formula comprising ~~at least~~ a sum of a **set** ~~plurality~~ of predictive variables each having a weighting co-efficient, comprising:

obtaining a mean value and a standard deviation value for each of the plurality of predictive variables,

calculating a slope value for each of the plurality of predictive input variables,

calculating a deviance value based on the mean value and the standard deviation value for each of the plurality of predictive input variables, wherein said calculating is performed by one of a data processor and a digital computer,

multiplying the deviance value and slope value for each of the plurality of predictive input variables to quantify the contribution of each of the plurality of said input variables to the score; **ranking each of the plurality of said input variables;**

and

~~displaying the relative contribution of each of said plurality of predictive input values to a user.~~ **displaying the score, each of the plurality of input variables, its value and its rank to a user.**

14. (previously presented) The method of claim 13, further comprising the step of populating a storage means with the mean value and standard deviation values for each of the plurality of predictive input variables.

15. (previously presented) The method of claim 13, wherein each of the plurality of predictive input variables is associated with at least one of a policyholder of the insurance policy and an item or risk to be insured.

16. (previously presented) The method of claim 15 wherein a score generated by the model determines the price for the insurance policy and the contribution is used to identify which of the predictive input variables had the greatest effect on the price.

17. (currently amended) In a system that employs a multivariate statistical model and a scoring formula generated therefrom having a set ~~plurality~~ of predictive variables for generating a score that is representative of a risk associated with an insurance policyholder and for pricing a

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particular coverage based on the score, a computerized method of quantifying the relative

contribution of each of a ~~the~~ plurality of predictive variables to the score comprising:

generating a multivariate statistical model from a set of variables and their respective values

associated with insurance policy risk to identify a set of predictive variables;

generating a profitability scoring formula based on said multivariate statistical model, said

profitability scoring formula comprising a sum of a **set** ~~plurality~~ of predictive variables each

having a weighting co-efficient;

receiving a value for each of a plurality of predictive variables;

populating a database associated with the system with a mean value and a standard deviation

value for each of the plurality of predictive variables;

calculating a slope value for each of the plurality of predictive variables;

calculating a deviance value based on the mean value and the standard deviation value for each

of the plurality of predictive variables, wherein said calculating is performed by one of a data

processor and a digital computer,

multiplying the deviance value and slope value for each of the plurality of predictive variables to

quantify the contribution of each of the plurality of predictive variables to the score;

ranking each of the plurality of said input variables;

and

~~displaying said contributions to a user.~~

displaying the score, each input variable, its value and its rank to a user.

18. canceled.

19. (previously presented) The method of claim 17 wherein said calculating the slope further comprises the step of calculating the first derivative of the scoring formula with respect to a predictive variable of the plurality of predictive variables that is being analyzed.

20. (original) The method of claim 17 wherein the deviance value is calculated as follows:

$$\text{Deviance of } x_i = (x_i - \mu_i)/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive variable x_i.

21. (new) The system of claim 1, wherein the plurality of input variable values received corresponds to a particular piece of underwritten or proposed insurance business.

22. (new) The method of claim 8, wherein the plurality of input variable values received corresponds to a particular piece of underwritten or proposed insurance business.

22. (new) The method of claim 13, wherein the plurality of input variable values received corresponds to a particular piece of underwritten or proposed insurance business.

23. (new) The method of claim 17, wherein the plurality of input variable values received corresponds to a particular piece of underwritten or proposed insurance business.